



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/554,629

04/12/2007

Peter Gaal

030263

9203

23696 7590 04/18/2008  
QUALCOMM INCORPORATED  
5775 MOREHOUSE DR.  
SAN DIEGO, CA 92121

EXAMINER

ISSING, GREGORY C

ART UNIT

PAPER NUMBER

3662

NOTIFICATION DATE

DELIVERY MODE

04/18/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com  
kascanla@qualcomm.com  
nanm@qualcomm.com

|                              |                                      |                                    |  |
|------------------------------|--------------------------------------|------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/554,629 | <b>Applicant(s)</b><br>GAAL ET AL. |  |
|                              | <b>Examiner</b><br>Gregory C. Issing | <b>Art Unit</b><br>3662            |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

Art Unit: 3662

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of Krasner (6,133,874) or Bloebaum et al (6,433,735) in view of Zhao (2003/0040331).

3. Krasner teaches a method and system for providing assistance data to a GPS user, exemplified in Figures 4 and while Figure 8 exemplifies the information related to a list of cell ID information at a particular time. Bloebaum et al disclose the claimed methods for acquiring a satellite signal on the basis of assistance data received from a remote location wherein the assistance data, which may be lists of cell IDs, are used to assist in the acquisition of the satellite signals, See Figures 1-3. As in any assisted GPS method, the mobile user requests assistance data and subsequently determines a need to determine a navigation solution. The assistance data is utilized to calculate an expected time of arrival of a navigation signal. Neither Krasner nor Bloebaum et al specify the evaluation of the validity of the assistance data. However, it is well known that assistance data is (1) valid for predetermined region, normally defined by the radius of the station broadcasting/transmitting the data, and (2) valid for a predetermined time based on the age of the data as suggested by Zhao, e.g. [0023]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify either Krasner or Bloebaum et al by validating the age of the assistance data in order to verify the applicability of the data to assist in the determination of the navigation solution. Zhao additionally teaches the mobile unit monitoring the cell-IDs as the mobile moves along a path.

Art Unit: 3662

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 15, 17, 18, 22-24, 26, 31 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Carter (5,666,122).

6. Carter discloses a method for rapid signal acquisition wherein “determining a need to acquire” is met by every navigation receiver since its intended operation is to determine a position when needed, “acquiring a first of the signals” is met by every GPS/GNSS navigation receiver since a satellite signal is required to be acquired in order to determine a navigation solution, and uses previously measured parameters of acquired signals to calculate acquisition assistance data to vary the frequency and code time search window.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-14, and 34-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. In claim 1, the claim fails to clearly and distinctly define where the "receiver clock bias" is derived or obtained from or if this part of the acquisition assistance information or how the assistance information is utilized.

Art Unit: 3662

10. Claim 34 sets forth a preamble of determining changes to a location of a mobile station but the body of the claim fails to determine such. It is unclear how this relates to acquisition of signals with the aid of acquisition assistance.

11. The claims appear to address several different inventions. Since a patent application is required to be directed to a single invention, applicants are required to show how the various method claims pertain to the same invention. It is unclear how the comparison of the list of base stations, for example, relates to a method of acquiring a signal on the basis of an expected time of arrival parameter derived from an estimate of receiver clock bias. Applicants should conform the claims to be directed to a single invention; if applicants continue to address separate inventions in the pursuing responses, a restriction requirement may be necessary.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory C. Issing whose telephone number is (571)-272-6973. The examiner can normally be reached on Monday - Thursday 6:00 AM- 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (571)-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3662

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory C. Issing/  
Primary Examiner  
Art Unit 3662

gci